DOCID: US20030233650

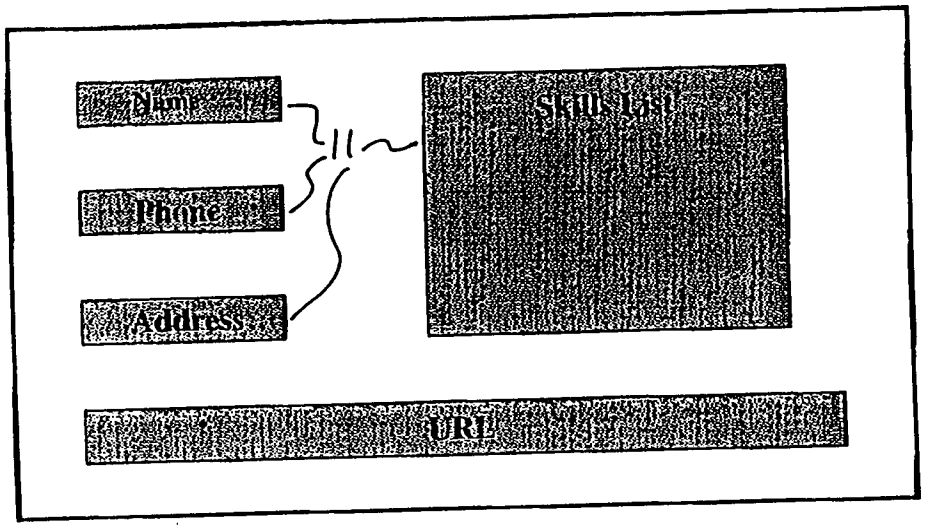


Figure 1

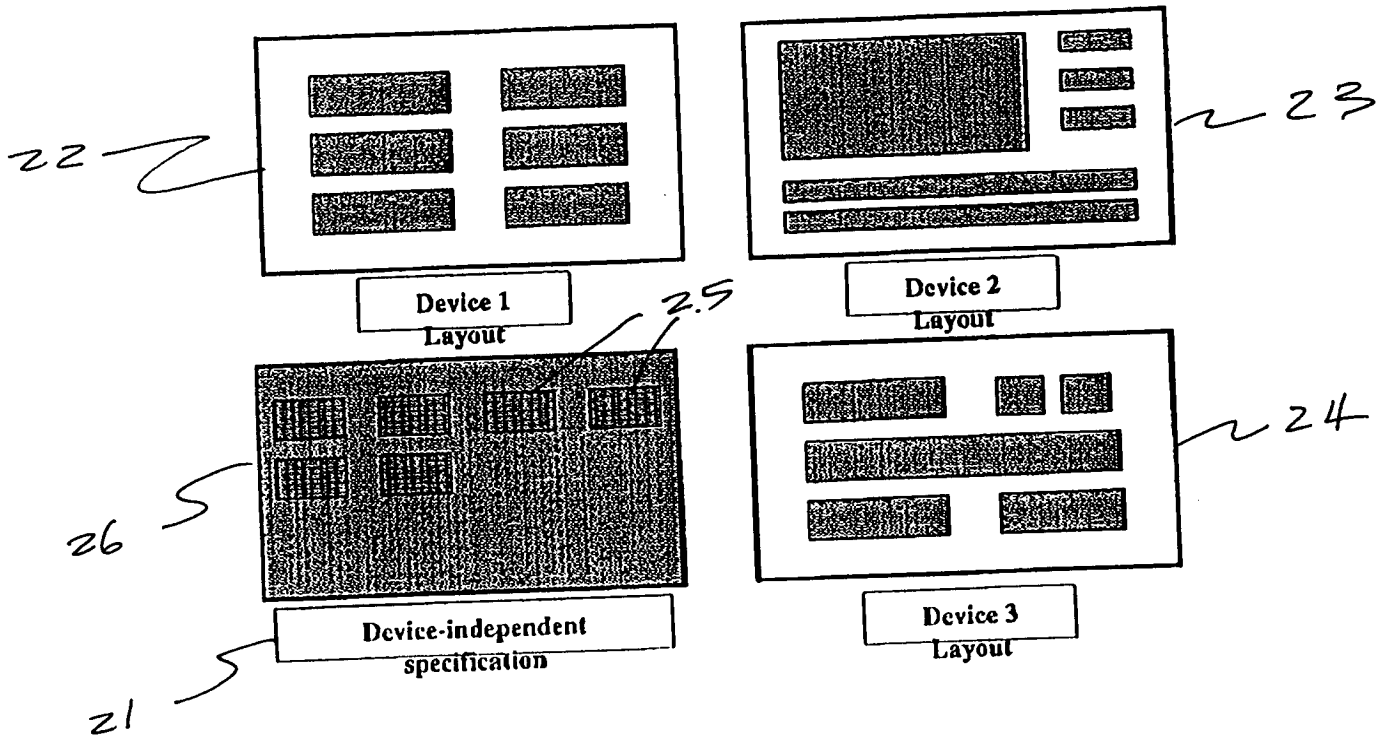

22
23
Device 1
Layout
Device 2
Layout
25
24
26
Device-independent
specification
Device 3
Layout
21

Figure 2.

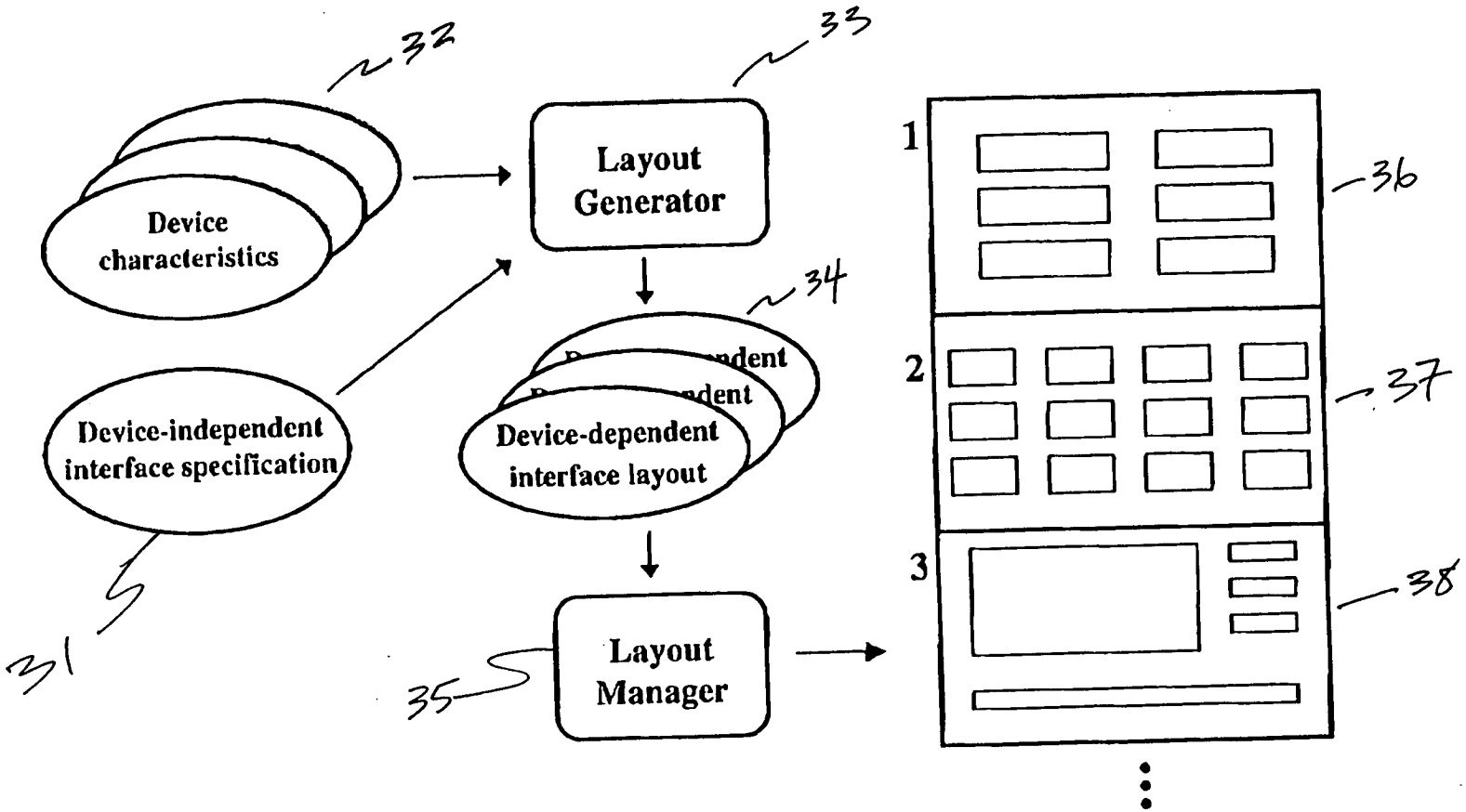

32
33
Device characteristics
Layout Generator
34
Device-independent interface specification
Device-dependent interface layout
31
35
Layout Manager
1
2
3
36
37
38

Figure 3.

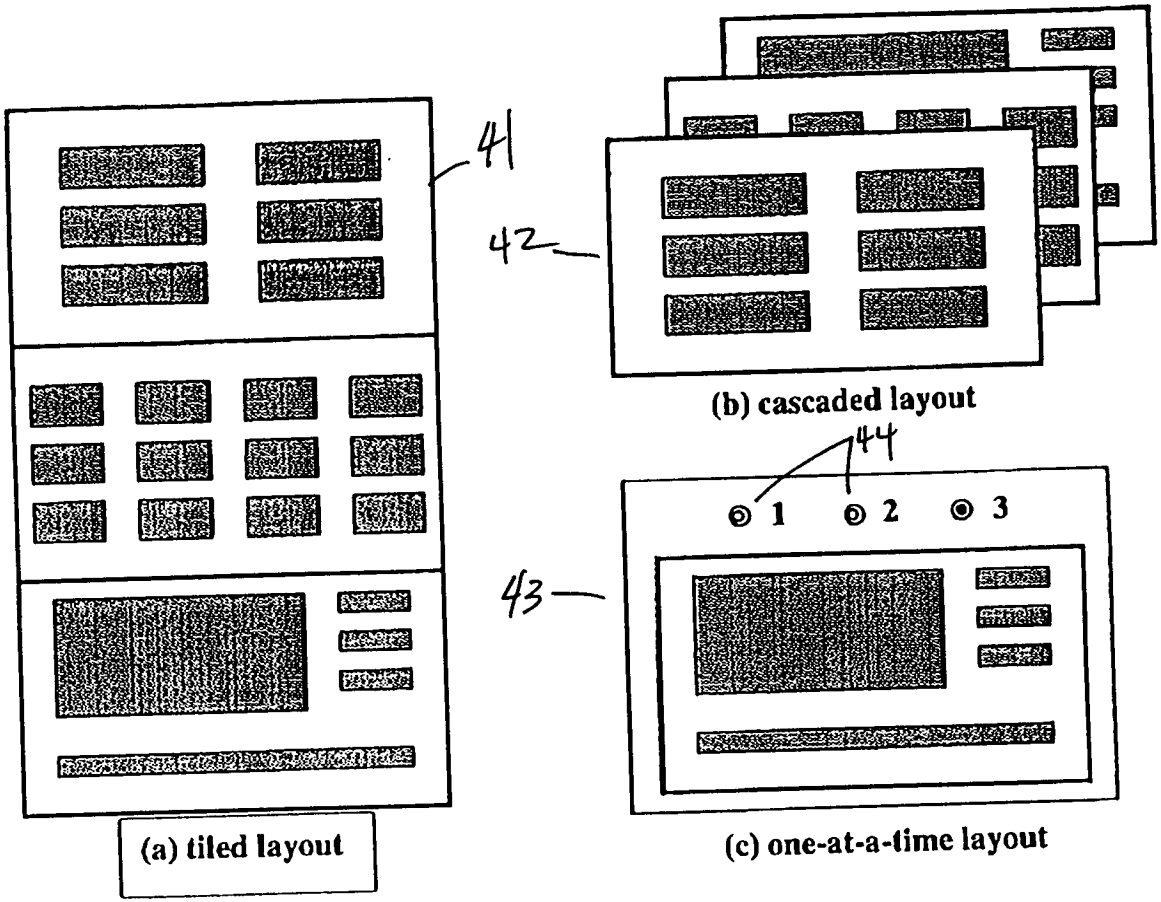

41
42
(b) cascaded layout
44
1
2
3
43
(a) tiled layout
(c) one-at-a-time layout

Figure 4.

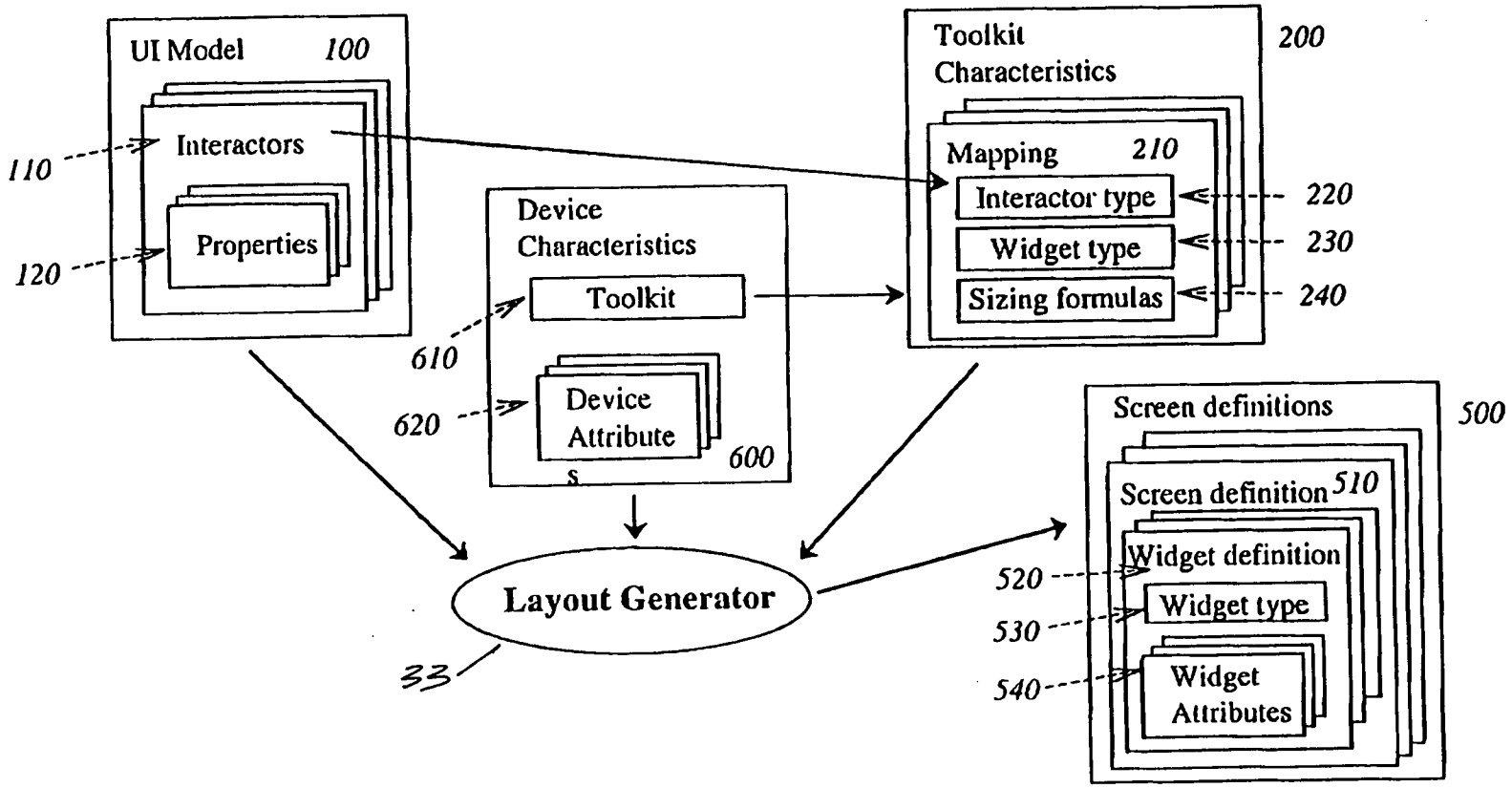

UI Model
100
Interactors
110
Properties
120
Toolkit
Characteristics
200
Mapping
210
Interactor type
220
Widget type
230
Sizing formulas
240
Device
Characteristics
Toolkit
610
620
Device
Attribute
s
600
Layout Generator
33
Screen definitions
500
Screen definition
510
Widget definition
520
Widget type
530
Widget
Attributes
540

Figure 5.

```
Application Name="JobFair"                                          100
 Interactor Name="LastName" Type="Input"                            110
   Property Name="label" Value="LastName: "                         120
 Interactor Name="SkillsList" Type="SelectableList"                 130
   Property Name="label" Value="Skills:"                            140
   Property Name="multipleSelect" Value=false                       150
 Interactor Name="BoothsList" Type="SelectableList"                 160
   Property Name="label" Value="Booths:"                            170
   Property Name="multipleSelect" Value=true                        180
```

Figure 5A

Express Mail Label No. EL 955 010 325 US

YOR920010355US1
Page 6 of 16

YOR920010255US1
Page 7 of 16

```
Device Name="PalmPirate"                    100
  Toolkit Name="myToolkit"                  110
  Screen Width=150 Height=150               120
```

Figure 5B

Express Mail Label No. EL 809 750 305 US

```
Toolkit Name="myToolkit"                                                    100
 Mapping InteractorName="Input" Widget="EntryField"                         110
   Sizing Name="Width" Value=(10*label.numChars)                            120
   Sizing Name="Height" Value=(20)                                          130
 Mapping InteractorName="SelectableList" Widget="ChoiceList"                140
   Sizing Name="Width" Value=(100)                                          150
   Sizing Name="Height" Value=(100)
```

FIGure 5C

Express Mail Label No. EL 657 020 355 US

YOR920010355US
Page 9 of 16

```
Application Name="JobFair" Device="PalmPirate" Toolkit="myToolkit"      100
 Screen Name="Screen1"                                                  110
   Widget Type="myToolkit.EntryField"                                   120
    Attribute Name="Text" Value="LastName: "                            130
    Attribute Name="Position" Value=(20,20)                             140
    Attribute Name="Size" Value=(100,20)                                150
   Widget Type="myToolkit.ChoiceList"                                   160
    Attribute Name="Label" Value="Skills:"                              170
    Attribute Name="Position" Value=(20,60)                             180
    Attribute Name="Size" Value=(100,100)                               190
    Attribute Name="Multi" Value=false                                  200
 Screen Name="Screen2"                                                  210
   Widget Type="myToolkit.ChoiceList"                                   220
    Attribute Name="Text" Value="Booths:"                               230
    Attribute Name="Position" Value=(20,20)                             240
    Attribute Name="Size" Value=(100,100)                               250
    Attribute Name="Multi" Value=true                                   260
```

Figure 5D

0000000000

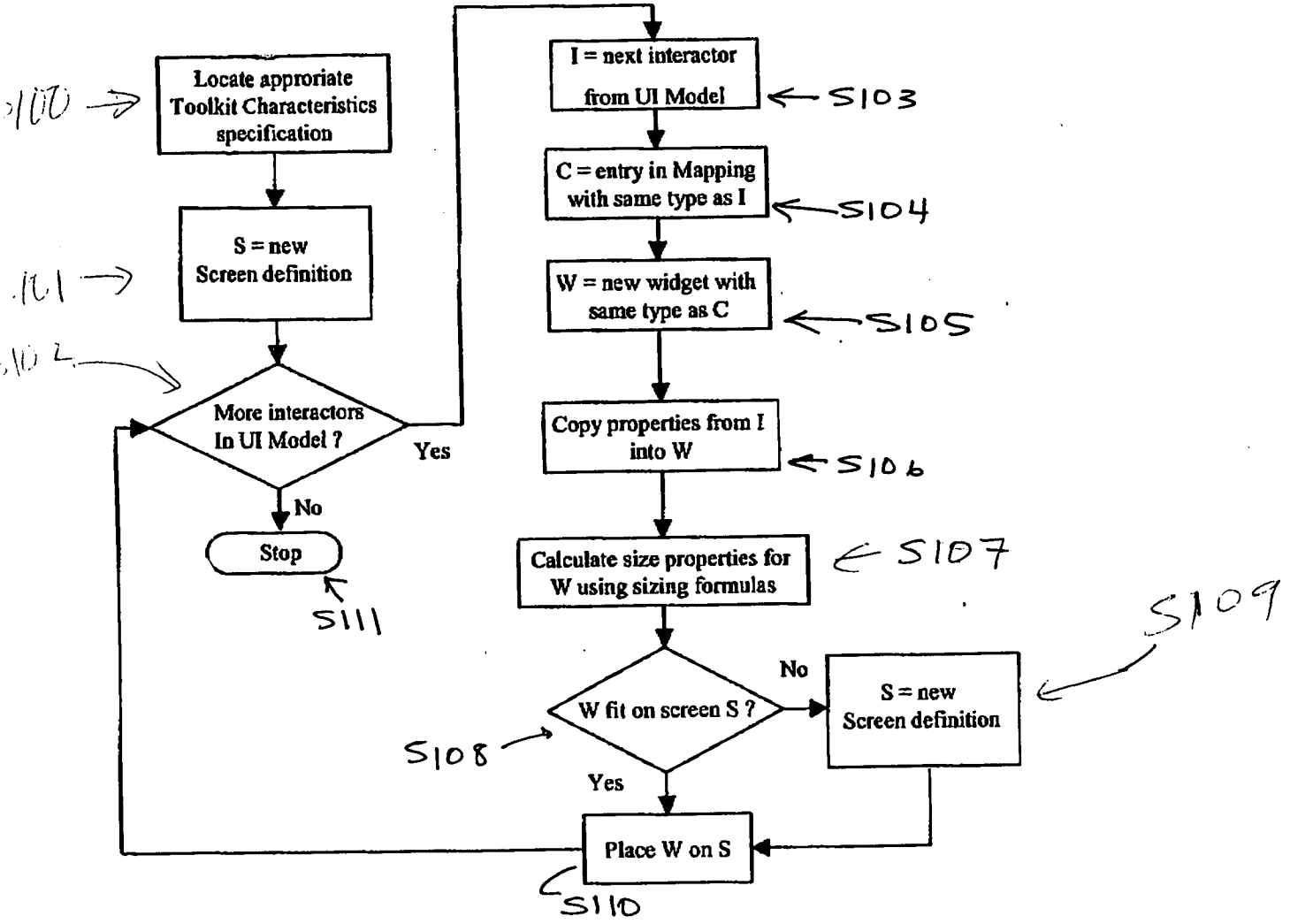

Locate approriate Toolkit Characteristics specification
S100
S = new Screen definition
S101
S102
More interactors In UI Model ?
Yes
No
Stop
S111
I = next interactor from UI Model
S103
C = entry in Mapping with same type as I
S104
W = new widget with same type as C
S105
Copy properties from I into W
S106
Calculate size properties for W using sizing formulas
S107
W fit on screen S ?
S108
No
S = new Screen definition
S109
Yes
Place W on S
S110

FIGURE 5E

TOOTSO" 18225860

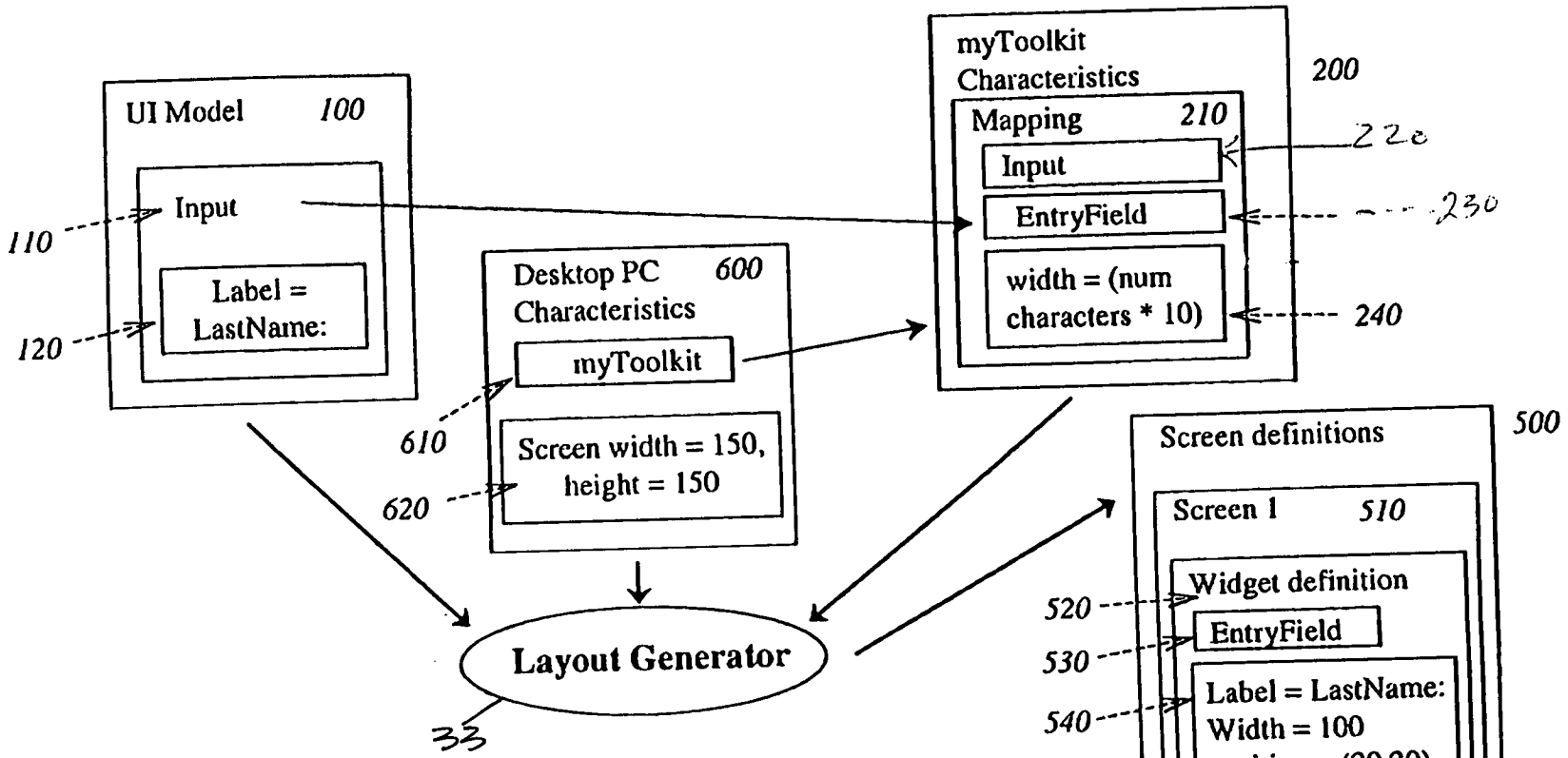


Figure 6.

DOCSO - 10225360

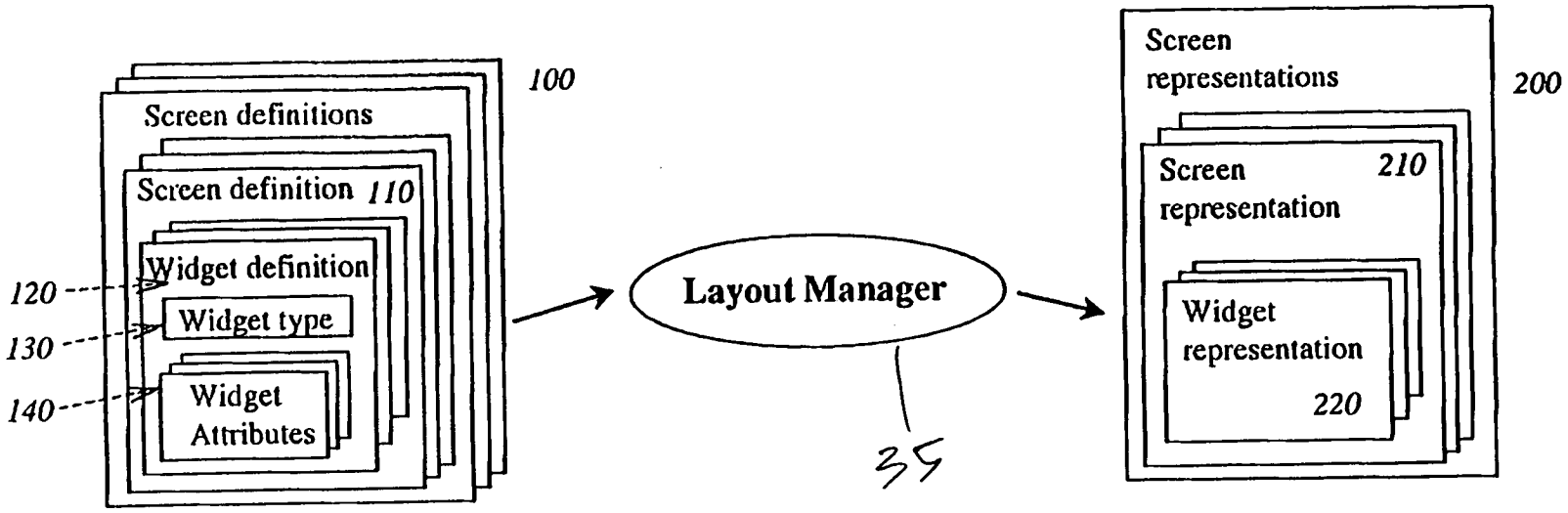


Figure 7.

TOOLSO "1822660

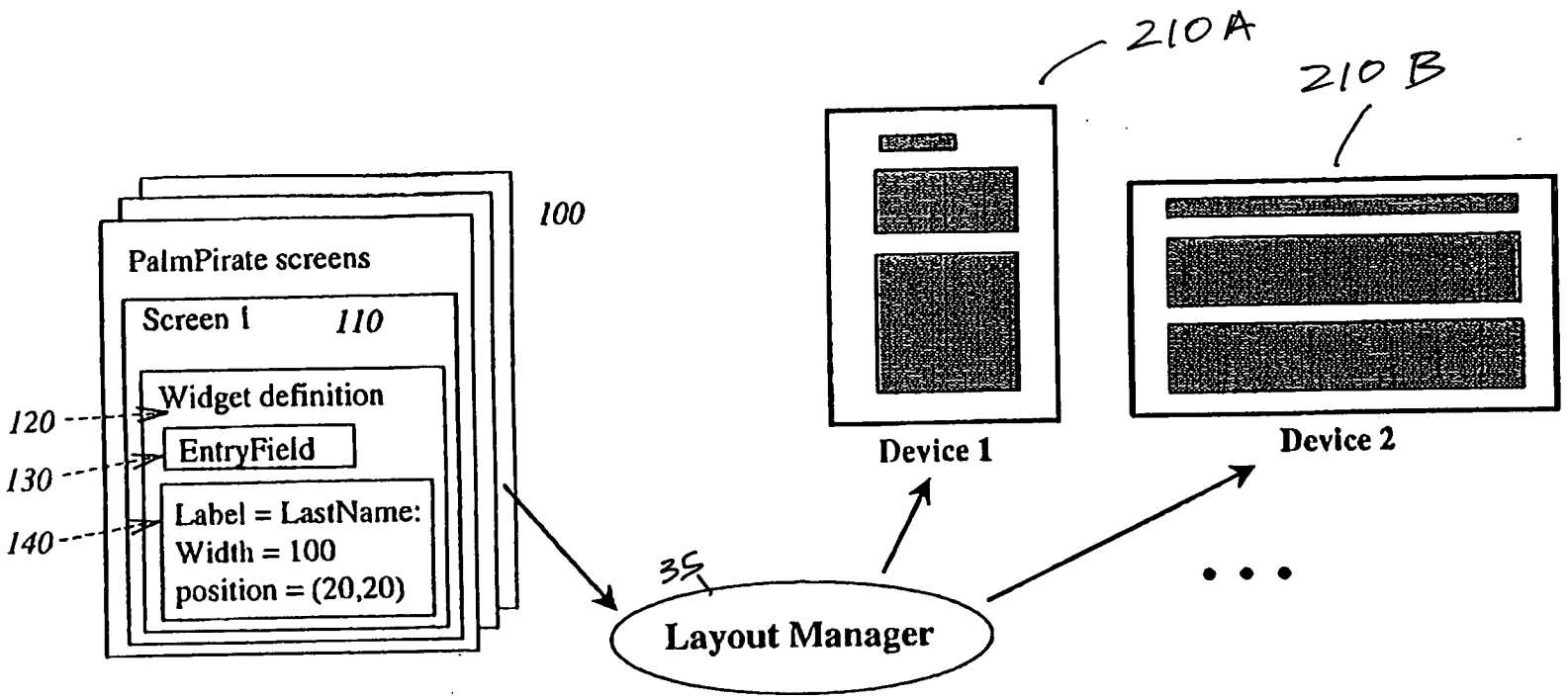


Figure 8.

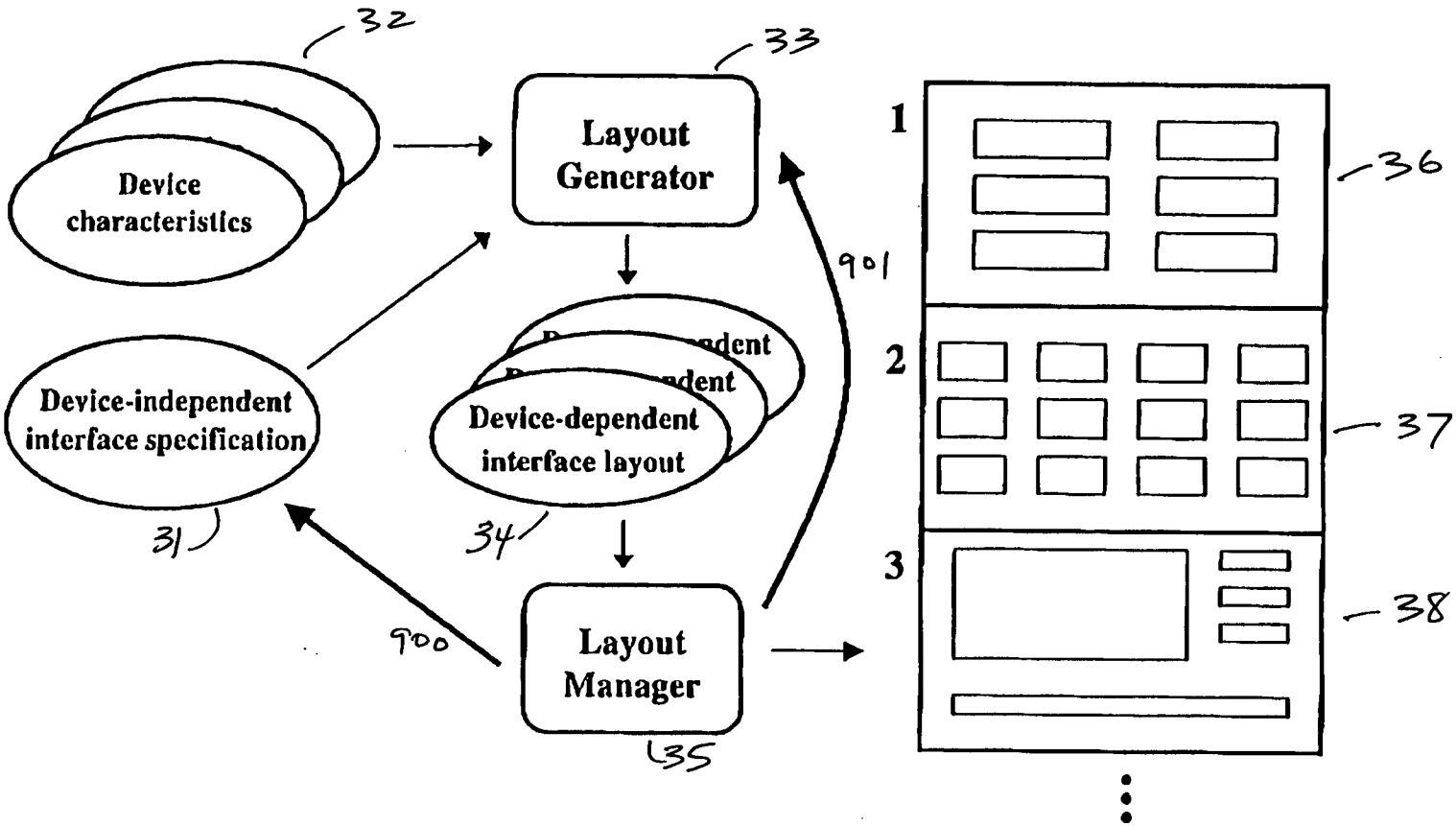

32
33
Device characteristics
Layout Generator
1
36
901
Device-independent interface specification
Device-dependent interface layout
2
37
31
34
3
38
900
Layout Manager
35

Figure 9.A

YOR920010355US1
Page 15 of 16

UI Model description file

```
Application Name="JobFair"                                              100
 Interactor Name="LastName" Type="Input"    ObjID=1                     110
   Property Name="label" Value="LastName: "                             120
```

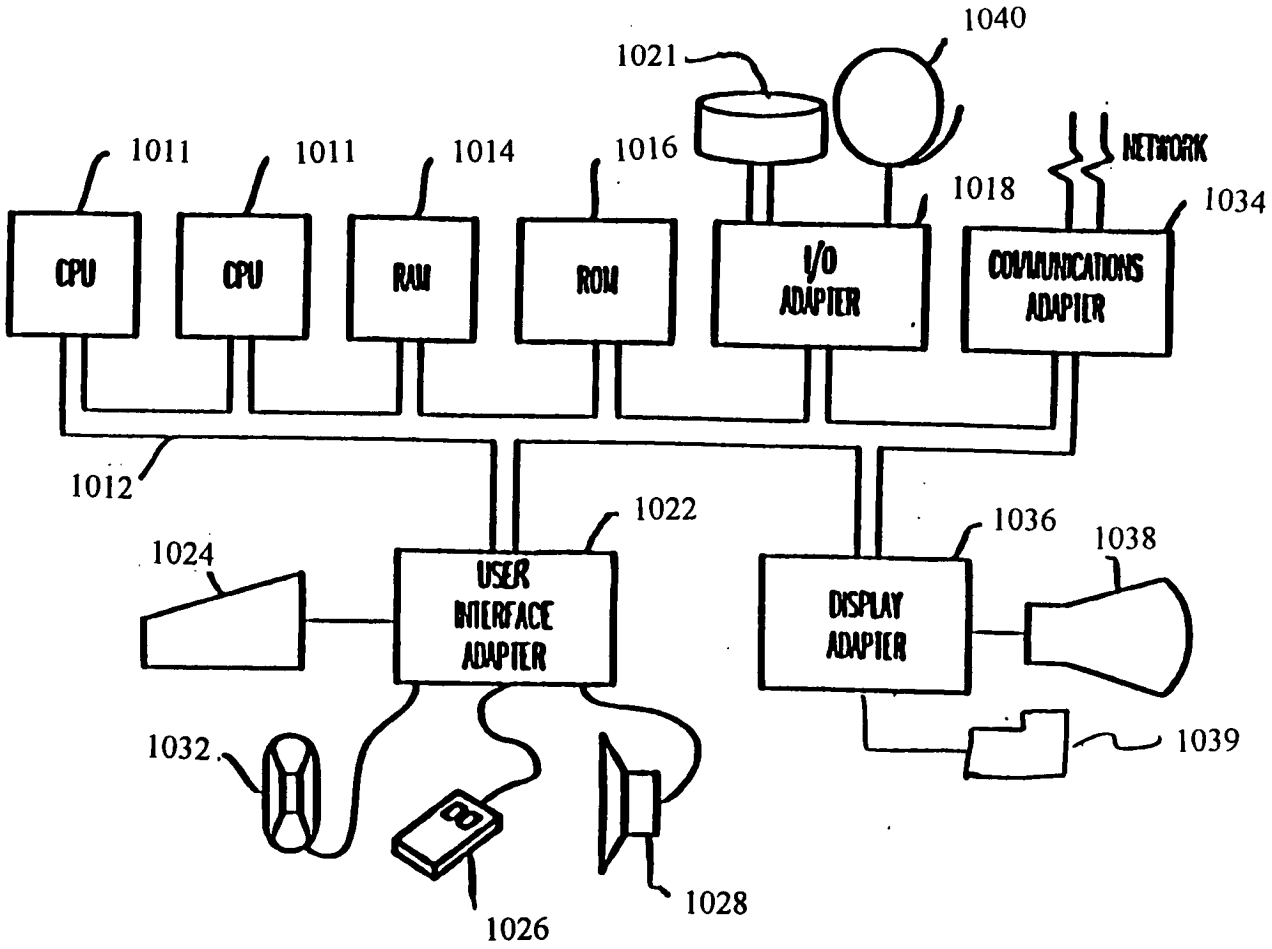
Device-specific layout specification file

```
Application  Name="JobFair"  Device="PalmPirate" Toolkit="myToolkit"     200
 Screen Name="Screen1"                                                  210
   Widget Type="myToolkit.EntryField"  ObjID=1                          220
     Attribute Name="Text" Value="LastName: "                           230
     Attribute Name="Position" Value=(20,20)                            240
     Attribute Name="Size" Value=(100,20)                               250
```

Figure 9B

Docket No. YOR920010355US1

FIGURE 10



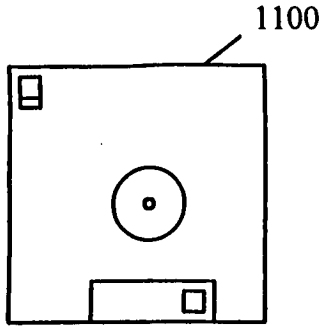


FIGURE 11